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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,240	10/15/2003	Christopher J. C. Burges	MS1-1674US	7597

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EXAMINER	
THOMAS, JASON M	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,240	BURGES ET AL.	
	Examiner	Art Unit	
	Jason Thomas	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-13,15,16 and 21-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-13,15,16 and 21-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pgs. 12-16, filed November 18, 2008, with respect to the rejections of claims 1-2, 7, 9-10, 12-13, 15-16, 21-22, 25 and 27 under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Cobbley et al, U.S. Patent No. 5,818,510 (hereinafter Cobbley), Maybury et al., U.S. Patent No. 6,961,954 B1 (hereinafter Maybury) and Gary Culliss, U.S. Patent Pub. No. 6,014,665 (hereinafter Culliss).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 2, 7, 9, 10, 12, 21, 22, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky et al., U.S. Patent No. 6,434,520 B1 (hereinafter Kanevsky) in view of Geshwind, U.S. Patent No. 7,080,392 B1 (hereinafter Geshwind), Cobbley and Maybury.

Regarding claims 1 and 21: Kanevsky discloses a processor-readable storage medium comprising processor-executable instructions and a system for

executing those instructions (see [abstract], [col. 2, ll. 28-35] for a program tangibly embodied on a program storage device and system for executing said program) configured for: receiving a request for information regarding a media object (see [figure 3 no. 301 and 302], [figure 4a], [col. 1, ll. 57-60], [col. 8, ll. 49-61], [col. 9, ll. 4-9] for user queries used to index information media objects); inferring the information from repeat instances of media objects ([col. 9, ll. 34-46], [col. 10, ll. 10-24] for identifying matching (repeating) media segments that have similar or matching voiceprints) occurring within one or more media streams (see [col. 2, ll. 57-66] for identification in multiple media streams; see also [col. 1, ll. 17-27], [col. 1, ll. 61 through col. 2, ll. 4], [col. 2, ll. 60 through col. 3, ll. 4] for multiple media sources such as, radio, television, video, telephone, and data streams from which media objects can occur, etc.); and returning the information (see [col. 2, ll. 1-4], [col. 9, ll. 4-9] for retrieving/ obtaining audio segments resulting from the search) but is silent regarding wherein the inferring comprises comparing temporal lengths of repeat instances of the media object with one another to determine different versions of the media object, the different versions of the media object selected from the group comprising: a longest version of the media object; a number of longer versions of the media object; a shortest version of the media object; a number of shorter versions of the media object; wherein the inferring further comprises determining a number of related media objects, wherein: (i) the related media objects are determined based on temporal proximities of media objects relative to the media object associated with the

request, and (ii) the related media objects have a higher frequency of repeat instances to one another.

Geshwind teaches a system and method of organizing media to produce a selected subset of data for the user. This subset is organized by producing levels of abstraction such that a longest version of a media object (referred to herein as a "full program") and a shortest version of a media object (referred to herein as a "highlight") are available for viewing. Geshwind also teaches where the longest version includes a portion of another selectable media object where said selectable media object is temporally shorter (see [abstract], [col. 4, ll. 24-38], [col. 4, ll. 46-48], [col. 6, ll. 1-32], [col. 7, ll. 51-60], [col. 15, ll. 57-64], [col. 16, ll. 9-13], [col. 23, ll. 56-61]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means to select different temporal length versions of a media object, as taught in Geshwind, when providing a system capable of searching for and making available repeat instances of media objects, as taught in Kanevsky, because the user may only want to hear a specific temporal length or summarized version of media (see [col. 2, ll. 33-36], [col. 5, ll. 63-66]).

Cobbley teaches an indexing system which determines related media objects based on temporal proximities of media objects relative to a requested media object (see [abstract], [cols. 5-6, ll. 56-3], [col. 7-8, ll. 53-15], [col. 8, ll. 23-64] where the system is able to track multiple versions of a particular program or

story segment and able to "know" that a video is related due to repeat transmissions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the searching methodology used to identify and index multimedia information by enabling the system to use temporal proximities to make determinations about the relation of multimedia as taught by Cobbley in order to identify more recent versions of a particular program or story segment.

Maybury teaches an indexing system which determines related media objects based on the frequency of repeat instances relative to one another (see [col. 3, ll. 13-24], [col. 4, ll. 14-25], [col. 21, ll. 30-53] for using the frequency of multimedia data to determine relationships of portions/segments of stories).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the searching methodology used to identify and index multimedia information by enabling the system to use the frequency of data extracted from multimedia to make determinations about the relation of multimedia as taught by Maybury in order to provide a more efficient means to search and analyze multimedia.

Regarding claims 2 and 22: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the inferring comprises searching a database for the information (see Kanevsky [col. 1, ll. 7-15], [col. 1, ll. 57 through col. 2, ll. 4], [col. 9, ll. 4-9] for searching a database), the database including

media objects and records of repeat instances of the media objects (see Kanevsky [col. 9, ll. 34-46], [col. 10, ll. 10-24] for storing media objects and matching (repeat) segments that have been archived and are available for retrieval).

Regarding claims 7 and 25: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the inferring comprises matching a key word from the request with metadata extracted from a media object (see Kanevsky [col. 7, ll. 22-26], [col. 8, ll. 49-52], [col. 8, ll. 61-66], [col. 10, ll. 50-53] for matching associated identity tags).

Regarding claims 9 and 27: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the inferring comprises limiting returned media object based on constraints contained within the request (see Kanevsky [col. 5, ll. 2-12], [col. 7, ll. 60-67], [col. 10, ll. 2-9] where the search can be limited to "N" best lists as defined by the requester).

Regarding claim 10: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the inferring comprises identifying temporal endpoints of each repeat instance of the media object (see Kanevsky [col. 9, ll. 40-46], [col. 10, ll. 16-20] for storing matching (repeating) segments; see also [col. 3, ll. 19-29] where the start and end times are identified for all segments).

Regarding claim 12: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach including the use of a computer comprising the processor-readable medium (see Kanevsky [col. 2, ll. 28-56] for using a

computer platform where a computer is inherently capable of acting as a server or client computer).

2. Claims 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Cobbley, Maybury and Culliss.

Regarding claim 13: Kanevsky discloses a processor-readable storage medium comprising processor-executable instructions (see [col. 2, ll. 28-56]) configured for: receiving a first user input regarding a first media object sending a first request for one or more additional media objects based on the user input, the one or more additional media objects each including a portion of a media clip in common with the first media object; receiving at least one of the one or more additional media objects; (see [abstract], [cols. 1-2, ll. 57-4], [cols. 4-5, ll. 66-12], [col. 8-9, ll. 49-20], [col. 10, ll. 50-62] for retrieving a desired media segment after receiving a user input for searching media segments where the said retrieved segment or more additional media objects are received as a result of the search within the media database and wherein the media object can share a portion of a media clip in common with the first media object) but does not teach:

receiving a second user input regarding a second media object;

sending a second request for one or more related media objects based on the second user input, the one or more related media objects comprising media objects that occur within a close temporal proximity of the second media object;

receiving at least one of the one or more related media objects;

rendering the received related media object;

receiving a third user input regarding a third media object;

sending a third request for one or more most-popular media objects based on the third user input, the one or more most-popular media objects comprising media objects having a higher frequency of repeat instances relative to one another;

receiving at least one of the one or more most-popular media objects; and

rendering the received most-popular media object.

Cobbley teaches an indexing system which renders a media object after receiving a user input, searches media (by sending a request for one or more related media objects based on the input) and determines related media objects based on the temporal proximity of the media object (see [abstract], [col. 6, ll. 56-3], [cols. 7-8, ll. 53-15], [col. 8, ll. 23-64], [col. 10, ll. 26-42]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the searching methodology in the indexing system of Kanevsky by enabling the system to use temporal proximities to conduct another search to make determinations about the relation of multimedia as taught by Cobbley in order to identify more recent versions of a particular program or story segment.

Maybury teaches an indexing system which renders a media object after receiving a user input, searches media (by sending a request for one or more related media objects based on the input) and determines related media objects based on the frequency of repeat instances relative to one another as well as the

popularity or importance of the media (see [col. 3, ll. 13-24], [col. 4, ll. 14-25], [col. 21, ll. 30-53] for using the frequency of multimedia data to determine relationships of portions/segments of stories; see also [cols. 6-7, ll. 53-2], [col. 16, ll. 48-61]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the searching methodology used to identify and index multimedia information by enabling the system to use the frequency, popularity (importance) of data extracted from multimedia to make determinations about the relation of multimedia as taught by Maybury in order to provide a more efficient means to search and analyze multimedia.

While Kanevsky, Cobbley and Maybury teach rendering a media object as a result of a search neither explicitly teach an ordered first second or third search.

Culliss teaches a method of searching which allows searchers to input a first, second and third search query to narrow their body of search (see [abstract], [cols. 2-3, ll. 65-9], [claim 5] where a user makes multiple search request to narrow the search field).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the searching methodology of Kanevsky, Cobbley or Maybury by providing multiple search inputs and request as taught by Culliss in order to narrow and focus a search to provide more relevant results.

Regarding claim 15: The combined teachings of Kanevsky in view of Cobbley, Maybury and Culliss, teach a processor-readable medium comprising further processor-executable instructions configured for rendering a media stream that includes the media object (see Kanevsky [col. 3, ll. 12-29] for processing (rendering) the audio data as it streams to determine the desired locations in the stream to be segmented).

Regarding claim 16: The combined teachings of Kanevsky in view of Cobbley, Maybury and Culliss, teach including the use of a computer comprising the processor-readable medium (see Kanevsky [col. 2, ll. 28-56] for using a computer platform where a computer is inherently capable of acting as a server or client computer).

3. Claims 3, 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Geshwind, Cobbley, Maybury and Ellis et al., U.S. Patent No. 5,436,653 (hereinafter Ellis).

Regarding claims 3 and 23: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the inferring comprises: identifying the repeat instances (see Kanevsky [col. 9, ll. 34-46] for identifying matching segments); and storing records of the repeat instances in a database (see [col. 10, ll. 16-20] for storing matching segments for later retrieval).

Kanevsky however does not explicitly teach wherein the inferring comprises the monitoring of one or more media streams.

Ellis however teaches a system for monitoring more than one broadcast signal (media stream) (see [fig. 1], [col. 8, ll. 35-36], [col. 9, ll. 14-17] where fig. 1 is described to depict the monitoring of multiple media streams).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to monitor more than one broadcast signal, as taught in Ellis, to infer matching (repeating) media objects, as taught in Kanevsky, because doing such increase the scope of searchable media thus improving the breadth of searchable information and system efficiency (see [col. 4, ll. 9-13]).

Regarding claim 11: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach wherein the identifying is based on an identifier included in the request, the identifier selected from the group comprising: a finger print of the media object (see Kanevsky [col. 9, ll. 30-40] for using a voiceprint/ selected segment to retrieve a segment having similar acoustic information); and channel code associated with the media object (see Kanevsky [col. 10, ll. 50-53] for performing a search with a particular channel).

Kanevsky does not explicitly teach identifying based on an identifier comprising a time stamp.

Ellis teaches identifying known broadcast segments by time (see [col. 9, ll. 59-61]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to use an identifier with a time stamp, as taught in Ellis, to identify segments for retrieval, as taught in Kanevsky, because this is desirable

information used to maintain a record of segment occurrences (see [col. 9, ll. 56-67]).

4. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Geshwind and Schultz U.S. Patent No. 5,737,734 (hereinafter Schultz).

Regarding claims 6 and 24: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach determining a number of related media objects (see Kanevsky [col. 9, ll. 34-46] where multiple matching segments are identified; see also [col. 7, ll. 63-67] where each unique segment is identified and given an ID tag such that the N-best list is generated where N represents a number of the best matching segments).

Kanevsky does not explicitly teach wherein said related media objects occur within a close temporal proximity of the media object with a higher frequency of repeat instances relative to one another.

Shultz however teaches where media objects occur in an order of relevance such that the objects most relevant to the query topic are positioned in a manner relative to one another so they can be readily identified by the user (see [col. 1, ll. 38-55], [col. 2, ll. 57-67]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to combine the feature of allowing a user to query and retrieve a list of files relevant to the query topic in a manner readily identifiable by the user, as taught in Shultz, with providing the ability to number the resulting

matching segments, as taught in Kanevsky, because this would allow the user to readily identify media files most relevant to the query topic (see [col. 1, ll. 50-55]).

5. Claims 8 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Geshwind, Cobbley, Maybury and Bolle et al., U.S. Patent No. 6,675,174 B1 (hereinafter Bolle).

Regarding claims 8 and 26: The combined teachings of Kanevsky in view of Cobbley and Maybury, teach all of the prior limitations but does not teach wherein the inferring comprises limiting returned media objects based on constraints contained within the request.

Bolle however teaches where a search engine requests information (operates) on a target media stream and returns (produces) a report including the data and time information documenting when each unique media event started and ended.

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, that the date and time information retrieved from the target media stream, as taught in Bolle, could be used in a search, as taught in Kanevsky (see [col. 10, ll. 50-62]), because additional search criteria would allow the user to further limit their search.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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